



Project: Creating a Standard for an Emergency Process to Respond to Expanding Vaccine-Preventable Disease Outbreaks and Epidemics in Washington State

Executive Summary

This project focuses on protecting vulnerable populations in Washington state from developing vaccine-preventable diseases. The goal is standardizing processes for:

1. Establishing expectations for preventive vaccination of those who interact with vulnerable populations,
2. Developing standards for who is considered at risk and who are potential sources of spread of vaccine-preventable diseases through their job or work environment, and
3. Creating guidelines and processes for passage of emergency rules for statewide responses to expanding disease outbreaks or epidemics.

The project involves a regularly scheduled review of vaccinations required for children and adults in Washington state. The project will develop standards for identifying those members of the population who are at special or increased risk for adverse outcomes from vaccine-preventable diseases and those who work with those populations. These definitions of persons at special risk will be used to assess current and desired rules for vaccination requirements for those working in high-risk environments. In collaboration with local public health officials, the project is to develop standards and processes for using the Washington State Board of Health's statutory authority to adopt statewide emergency rules during outbreaks and epidemics.

Project Description and Scope:

This project focuses on protecting vulnerable populations from exposure to vaccine-preventable disease by those who care for or educate them. Communicable disease prevention includes a wide range of activities, from disease surveillance, detection and prevention, to management and control of communicable disease. In situations of high-risk for a statewide epidemic, the Washington State Board of Health (Board) may pass emergency rules to allow for statewide urgent responses. This project will concentrate on developing the process for creating these emergency rules. However, those processes are dependent on existing measures that are contained in rules and guidance issued by the Board in collaboration with other state agencies and public health partners.

The scope of this project will include:

- 1) Completion of a periodic review of current vaccination recommendations or requirements,
- 2) Clarification of both who is at risk from and to vulnerable populations' when exposure to vaccine-preventable diseases occurs, and
- 3) Development of processes for passing emergency rules for control measures as part of urgent responses to expanding disease outbreaks or epidemics, including mandatory vaccinations.

This project will focus on three groups of adults working with vulnerable populations: healthcare workers, school staff including teachers, and staff in daycare centers.

Washington State Board of Health's Statutory Authority:

The Board has statutory authority to adopt rules requiring vaccination of adults working with vulnerable populations against infectious disease. The Board recognizes that this authority must be used carefully and implemented reasonably. The Board is sensitive to and generally avoids violating individual constitutional rights. The Board also recognizes that there must be clear processes for acting urgently when there is an actual danger to the public's health that cannot be resolved in another way.

In disease outbreak situations local health officers have the responsibility and authority to identify, direct, and enforce activities to prevent spread of disease. The Board has promulgated rules allowing local health officers to require isolation, quarantine, and/or immunization for selected populations. While local health officers have demonstrated their collaboration in addressing outbreaks, the Board has identified a need for standards around when an outbreak has moved from a local danger to an eminent statewide danger. Application of uniform rules across the state requires the determination of an eminent danger to the public's health that can only be resolved through mandatory statewide action. The Board recognizes that rules requiring immunization or quarantine for large segments of the state's population must address only the danger that cannot otherwise be resolved. Whereas in day-to-day activities, the current rules include exemptions for people for whom vaccinations may be particularly dangerous (e.g., the person is immunologically impaired) or oppressive (e.g., there are fundamental religious objections). The Board recognizes that in the midst of an expanding outbreak or epidemic,

there may be a need to provide mandates that would be considered oppressive in day-to-day or local circumstances.

Rationale:

Many vaccine-preventable infectious diseases have established and predictable patterns of recurrence and escalation (for example, Influenza virus). Protection for vulnerable populations, those who could be disproportionately harmed, should be part of regular disease control planning. This disease control planning effort includes regular review of which vaccines are mandated for the general population and why. The effort also includes being clear about the people who are mandated to be vaccinated because their work or activity disproportionately affects vulnerable populations potentially putting those vulnerable persons at more risk than the general population.

When there is an unexpected disease outbreak or escalation, many people's health and, in some cases, lives can be threatened. These outbreaks disrupt daily routines, affect people's abilities to work and hurt the economy. When such outbreaks occur, a timely response is essential to curtail the spread of the vaccine-preventable disease. These responses are typically the responsibility of local health officers. However, when the outbreak is rapidly spreading in the state, there is a need for a rapid and coordinated response across local health jurisdictions, authority for action needs to be clearly understood and the processes for implementing a statewide response need to be already in place. Experience with the H1N1 Influenza pandemic and the 2012 pertussis outbreak in Washington state revealed inadequate procedures and processes were in place to quickly address these imminent or growing risks to the citizens of Washington. In particular, there was lack of clarity about statewide authority for requiring adults working with vulnerable populations to be restricted from work or demonstrate that they were immunized. The Board proposes to put in place evidence-based procedures that are well known and available in advance of any vaccine-preventable disease outbreak.

Purpose of Project:

- To maintain protection of the population of the state from vaccine-preventable diseases;
- To better protect vulnerable populations against vaccine-preventable disease;
- To define those vocations and activities where the spread of vaccine-preventable diseases can be minimized by mandatory work restrictions or vaccination of adults working with those populations;
- To define when and how the Board's statutory authority to adopt rules is necessary to require persons working with vulnerable populations to meet requirements for minimizing vaccine-preventable diseases, up to and including restrictions from work, isolation and/or mandatory vaccinations; and
- To ensure that the plan and process for implementation of a timely coordinated, effective response to prevent and control vaccine-preventable disease outbreaks or epidemics in Washington state is in place and well understood.

Approval Process and Methods:

The first step is to present this project proposal to the Board for approval. If approved, the project will:

- Conduct a review of the currently mandated vaccines (for the general population; and healthcare workers, school staff including teachers, and staff members in daycare centers) in Washington state and elsewhere to ensure the immunization requirements are meeting best practices.
- Conduct a review of the literature to identify best vaccine-preventable disease practice for those who work with vulnerable populations. Identify who in healthcare, school, and daycare center settings are to be considered for recommendations for worker immunization practice and reporting.
- Consult with experts and key stakeholders to identify best options for managing vaccine-preventable disease in local settings. Identify criteria for which practices to implement in responding to expanding outbreaks and epidemics. These options may result in processes with or without a vaccination requirement.
- Convene an advisory group who will be charged with:
 - Refining or developing an epidemiological, legal and ethical framework for implementing measures to prevent or control vaccine-preventable diseases.
 - Assessing medical and non-medical measures to prevent the spread of vaccine-preventable diseases to vulnerable populations exposed in three settings, schools, childcare centers, and healthcare facilities.
 - Developing criteria to review and guide the development of rules to best protect vulnerable populations, up to and including work restrictions, isolation and requiring mandatory vaccination of adults working with vulnerable populations.
 - Developing processes for addressing escalations of recommendations and mandates to a statewide level when an expanding outbreak or epidemic of vaccine-preventable diseases occurs, including a recommended sequence of actions and how to assess their effectiveness.
 - Developing a process for quickly determining when emergency rule making is necessary, including clearly identifying the roles of key partners in developing and implementing the emergency rules.

When completed, the recommendations will be collated and presented to the Board for approval.

Definitions:

Communicable or contagious disease is an illness caused by an infectious agent of public health concern that can be transmitted from one person, animal, or object to another person by direct or indirect means including transmission through an intermediate host or vector, food, water, or air.

Vaccine-preventable diseases are infectious diseases for which an effective preventive vaccine exists. Examples of vaccine preventable diseases that are spread from person-to-person include H1N1, Hepatitis A, and Pertussis.

Vulnerable populations are those persons or special groups of the public who are at increased risk for adverse effects of a preventable disease and whose underlying health precludes use of common preventive measures. For example, some patients with respiratory compromise are particularly sensitive to or at risk of severe morbidity or death from a lung infection, allergens, or other pathogenic agents. Another example is a patient who lacks the ability to develop immunity or resistance to the disease. For these patients, what would be a minor infection in a normal individual can be life threatening. Vulnerable populations also include those who may be too young to have a completely functioning immune system or those who are unable to access to vaccines for preventable diseases for themselves.

The phrase “workers who have contact with vulnerable populations” is used to identify those workers who have regular and/or close contact with vulnerable populations or who may have predictable likelihood of exposure of the vulnerable populations. Examples are healthcare workers, day care workers, and schoolteachers and school workers.

An Outbreak exists when there are more cases of a particular disease over a defined time than expected for the given area or specific group of people. Outbreaks may occur in a restricted geographical area, in a specific population or in a particularly susceptible (vulnerable) population. An outbreak may last for a few days or weeks, or for several years. Outbreaks do not always involve large numbers of persons. An outbreak could include a single case of a communicable disease that is long absent from a particular population or caused by an agent (e.g., bacterium or virus) not previously recognized in the community or area. Identifying an outbreak is often easier in those diseases where there is a requirement to report suspected or documented cases.

Epidemic refers to a marked increase, often sudden, in the number of cases of a disease above what is expected in a given population in a given area over a given time period. The term includes many of the features of an outbreak, but an outbreak that has larger numbers of cases, cases in larger or broader populations or cases occurring in larger geographic areas, such as counties or states.

Pandemic is an epidemic of an infectious disease that has spread through many human populations across a large region; for instance, across multiple continents or even worldwide.